

# 1998 Toxics Release Inventory

## **PUERTO RICO**

#### Reported Releases and Waste Management Activities (in pounds)

	Original Industries	New Industries	Total
On-site Releases	6,643,152	10,395,073	17,038,225
Air Emissions	6,504,721	10,167,420	16,672,141
Surface Water Discharges	128,874	72,912	201,786
Underground Injection Class I Wells	0	0	0
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	250	0	250
Other On-site Land Releases	9,307	154,741	164,048
Off-site Releases (Transfers Off-site to Disposal)*	643,651	263,703	907,354
Total On- and Off-site Releases	7,286,803	10,658,776	17,945,579
Recycled On-site	12,450,070	3,860,419	16,310,489
Recycled Off-site	11,561,577	1,875,384	13,436,961
Energy Recovery On-site	692,502	0	692,502
Energy Recovery Off-site	11,095,257	8,561,449	19,656,706
Treated On-site	18,518,748	117,170	18,635,918
Treated Off-site **	11,680,723	2,070,889	13,751,612
Quantity Released On- and Off-site***	7,306,280	10,654,869	17,961,149
Total Production-related Waste Managed	73,305,157	27,140,180	100,445,337
Total Non-production-related Waste Managed	12,304	7	12,311

#### Transfers Off-site for Further Waste Management/Disposal

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Recycling	11,208,523	1,875,384	13,083,907
Energy Recovery	11,103,381	8,561,451	19,664,832
Treatment	8,759,520	2,102,040	10,861,560
Publicly Owned Treatment Works (POTWs)	3,275,848	65	3,275,913
Metals and Metal Compounds*	2,379	0	2,379
Non-metal TRI Chemicals**	3,273,469	65	3,273,534
Other Off-site Transfers****	1,428	0	1,428
Off-site Transfers to Disposal (not including metals to POTWs)	643,134	271,514	914,648
Total Transfers Off-site for Further Waste Management/Disposal	34,991,834	12,810,454	47,802,288

- \* Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- \*\*\* Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- \*\*\*\* Transfers reported without a valid waste management code.

### For More Information . . .

 State Contact:
 EPA

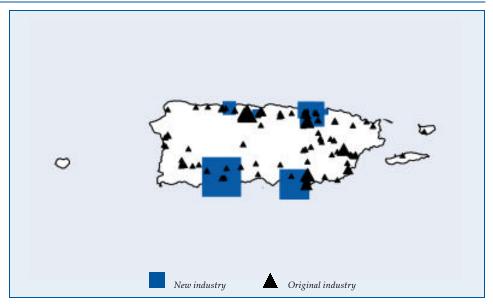
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**EPA Regional Contact:** Nora Lopez (732) 906-6890 Fax: (732) 321-6788 To obtain TRI data use assistance, call TRI User Support Service (TRI-US):

(202) 260-1531 Fax: (202) 401-2347



The largest marker in the state map represents the largest facility for on-site releases in Puerto Rico. All markers are proportionally-sized to represent the on-site releases at each facility within this territory.

#### State/TRI Data

Population			3,860,091
Square Miles			3,427
Total Facilities			166
Total Forms			529
Form As			79
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	Original Industries	New Industries	Total
National Rank for Total On- and O	ff-site Releases*		
Rank	40	40	43
Pounds	7,286,803	10,658,776	17,945,579
National Rank for Total On-site Re	leases**		
Rank	39	38	42
Pounds	6,643,152	10,395,073	17,038,225
National Rank for Total Releases w	ithin State***		
Rank	40	39	43
Pounds	7,251,423	10,598,933	17,850,356
National Rank for Production-relate	ed Waste Managed		
Rank	38	32	41
Pounds	73,305,157	27,140,180	100,445,337

- Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- \*\* Includes amounts released at the facility. Excludes amounts transferred to other sites.
- \*\*\* Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

## **PUERTO RICO**

### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

			On-site Re	eleases		Off-site Releases		Off-si	te Transfers to Dispo	sal
		Air	Surface Water	Underground	On-site Releases to	Transfers Off-site to	Total Releases in	Transferred Into	Transferred Within	Transferred Out of
CAS		Emissions	Discharges	Injection	Land	Disposal *	the State**	State	State	State
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
75-09-2	Dichloromethane	2,243,405	0	0	0	5	2,243,410	0	0	5
67-56-1	Methanol	1,225,874	110,299	0	1,428	583	1,338,184	0	8	575
108-88-3	Toluene	1,066,235	12	0	0	110	1,066,357	0	20	90
78-93-3	Methyl ethyl ketone	251,531	0	0	0	0	251,531	0	0	0
_	Zinc compounds	556	600	0	1,261	224,746	227,163	0	224,746	0
67-66-3	Chloroform	181,242	0	0	0	0	181,242	0	0	0
_	Nitrate compounds	0	0	0	18	155,000	155,018	0	155,000	0
71-36-3	n-Butyl alcohol	136,843	0	0	0	0	136,843	0	0	0
110-54-3	n-Hexane	135,139	9	0	0	0	135,148	0	0	0
110-82-7	Cyclohexane	133,812	0	0	0	<i>7</i> 5	133,887	0	5	70

<sup>\*</sup> Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

#### On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

			On-site R	Releases		Off-site Releases		Off-s	ite Transfers to Dispo	sal
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
CAS		Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
7664-93-9	Sulfuric acid	8,920,291	0	0	0	0	8,920,291	0	0	0
7664-41-7	Ammonia	781,583	0	0	0	0	781,583	0	0	0
_	Nickel compounds	128,913	31,940	0	150,969	199,533	511,355	0	199,533	0
75-09-2	Dichloromethane	198,077	0	0	0	7,550	205,627	0	0	7,550
7440-66-6	Zinc (fume or dust)	27,553	30,183	0	3,772	3,772	65,280	0	3,772	0
67-56-1	Methanol	19,469	0	0	0	21,890	41,359	0	0	21,890
1330-20-7	Xylene (mixed isomers)	19,467	0	0	0	15,657	35,124	0	255	15,402
75-21-8	Ethylene oxide	30,000	0	0	0	0	30,000	0	0	0
75-05-8	Acetonitrile	1,348	0	0	0	22,812	24,160	0	0	22,812
7664-38-2	Phosphoric acid	1,456	10,789	0	0	0	12,245	0	0	0

<sup>\*</sup> Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

<sup>\*\*</sup> The chemical ranking is based on the amounts in this column.

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## **PUERTO RICO**

## On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Original Industries)

				Off-site Releases (Transfers Off-site to Disposal)					
			On-site Re Underground		On-site Rele	ases to Land			
	Air Emissions	Surface Water Discharges	Class I Wells	Class II-V Wells	RCRA Subtitle C Landfills	Other On-site Land Releases	Total On-site Releases*	Transferred Within State	Transferred Out of State
Facility, City, County	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Abbott Health Prods. Inc., Barceloneta, Barceloneta	1,136,763	0	0	0	0	0	1,136,763	0	0
Chemsource Corp., Guayama, Guayama	739,100	0	0	0	0	0	739,100	0	15
Coatings Inc. & Co., Bayamon, Bayamon	680,386	0	0	0	0	0	680,386	0	0
Pharmacia & Upjohn Caribe Inc., Arecibo, Arecibo	677,392	0	0	0	0	0	677,392	0	0
Schering-Plough Prods. L.L.C., Las Piedras, Las Piedras	657,287	0	0	0	0	0	657,287	0	0
Phillips Puerto Rico Core Inc., Guayama, Guayama	496,898	67	0	0	0	0	496,965	75	0
Puerto Rico Sun Oil Co., Yabucoa, Yabucoa	355,850	17,966	0	0	0	0	373,816	0	364
Schering-Plough Prods. Inc., Manati, Manati	278,090	0	0	0	0	0	278,090	0	0
Merck Sharp & Dohme Quimica of PR Inc., Barceloneta, Barceloneta	146,923	0	0	0	0	0	146,923	0	0
Baxter Healthcare Corp. of PR, Añasco, Añasco	138,396	0	0	0	0	0	138,396	0	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

## On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)

	On-site Releases							Off-site Releases (Transfers Off-site to Disposal)	
			Underground	Injection	On-site Rele	ases to Land			
Facility, City, County	<b>Air</b> <b>Emissions</b> Pounds	Surface Water Discharges Pounds	Class I Wells Pounds	Class II-V Wells Pounds	RCRA Subtitle C Landfills Pounds	Other On-site Land Releases Pounds	Total On-site Releases* Pounds	Transferred Within State Pounds	Transferred Out of State Pounds
PREPA — South Coast Power Plant, Guayanilla, Guayanilla	3,426,160	30,678	0	0	0	49,058	3,505,896	49,058	0
PREPA — Aguirre Power Generation Complex, Salinas, Salinas	2,446,162	30,854	0	0	0	58,220	2,535,236	58,220	0
PREPA — San Juan Steam Power Plant, Puerto Nuevo, San Juan	1,959,243	299	0	0	0	26,949	1,986,491	54,998	0
PREPA — Palo Seco Power Plant, Levittown, Toa Baja	1,151,059	292	0	0	0	20,514	1,171,865	41,029	0
PREPA — Cambalache Combustion Turbine Plant, Arecibo, Arecibo	874,454	0	0	0	0	0	874,454	0	0
Safety-Kleen Envirosystem Co. of Puerto Rico Inc., Manati, Manati	234,929	0	0	0	0	0	234,929	0	67,654
Steri-Tech Inc., Salinas, Salinas	30,000	0	0	0	0	0	30,000	0	0
Union Carbide Caribe L.L.C., Penuelas, Penuelas	13,851	10,789	0	0	0	0	24,640	0	0
Ochoa Indl. Sales Corp., Cataño, San Juan	9,766	0	0	0	0	0	9,766	0	0
Esso Cataqo Bulk Terminal, Guaynabo, Guaynabo	9,229	0	0	0	0	0	9,229	540	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

## **PUERTO RICO**

### Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

	Recycled	Recycled	Energy Recovery	Energy Recovery	Treated	Treated	Quantity Released On-	Total Production- related Waste	Total Non- Production- related Waste
	On-site	Off-site	On-site	Off-site	On-site	Off-site	and Off-site*	Managed	Managed
Facility, City, County	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Abbott Health Prods. Inc., Barceloneta, Barceloneta	7,958,020	0	0	2,670,177	4,798,364	309,610	1,146,591	16,882,762	0
Pharmacia & Upjohn Caribe Inc., Arecibo, Arecibo	0	3,195,000	0	2,176,436	0	1,971,561	900,780	8,243,777	840
Chemsource Corp., Guayama, Guayama	480,987	233,915	0	0	558,022	83,901	739,100	2,095,925	9
Coatings Inc. & Co., Bayamon, Bayamon	672,505	0	0	0	688,336	22,360	680,386	2,063,587	0
Schering-Plough Prods. L.L.C., Las Piedras, Las Piedras	0	174,650	0	15,856	135,571	115,581	651,986	1,093,644	0
Phillips Puerto Rico Core Inc., Guayama, Guayama	449,565	0	652,043	519	703,871	743	497,040	2,303,781	0
Puerto Rico Sun Oil Co., Yabucoa, Yabucoa	0	0	0	0	147,350	8,620	373,616	529,586	0
Schering-Plough Prods. Inc., Manati, Manati	0	473,700	0	1,149,110	0	1,015,020	278,090	2,915,920	0
Harvey Hubbell Caribe Inc., Bayamon, Bayamon	0	0	0	0	0	0	209,892	209,892	2
Caribe GE ED&C / Plating Inc., Arecibo, Arecibo	0	317,560	0	0	87,346	15,137	208,788	628,831	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

## Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
PREPA South Coast Power Plant, Guayanilla, Guayanilla	0	0	0	0	0	0	3,554,940	3,554,940	0
PREPA — Aguirre Power Generation Complex, Salinas, Salinas	0	0	0	0	0	0	2,593,451	2,593,451	0
PREPA San Juan Steam Power Plant, Puerto Nuevo, San Juan	0	0	0	0	0	0	2,041,484	2,041,484	2
PREPA — Palo Seco Power Plant, Levittown, Toa Baja	0	0	0	0	0	0	1,212,889	1,212,889	0
PREPA Cambalache Combustion Turbine Plant, Arecibo, Arecibo	0	0	0	0	0	0	874,444	874,444	0
Safety-Kleen Envirosystem Co. of Puerto Rico Inc., Manati, Manati	3,860,419	1,875,384	0	8,545,872	89,191	2,068,828	302,578	16,742,272	0
Steri-Tech Inc., Salinas, Salinas	0	0	0	0	25,000	0	30,000	55,000	1
Union Carbide Caribe L.L.C., Penuelas, Penuelas	0	0	0	0	2,979	0	24,635	27,614	4
Esso Cataqo Bulk Terminal, Guaynabo, Guaynabo	0	0	0	0	0	0	8,508	8,508	0
Shell Co. Puerto Rico Ltd., Puerto Nuevo, San Juan	0	0	0	0	0	0	6,213	6,213	0

<sup>\*</sup>The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.